

## Abstracts

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the usually accepted measure of COPD severity categorization, spirometry, are not available.

**CARDIOVASCULAR****CARDIOVASCULAR—Clinical Outcomes Studies****PCV1**

**THE COST-EFFECTIVENESS OF IRBESARTAN IN THE TREATMENT OF HYPERTENSIVE TYPE 2 DIABETIC PATIENTS WITH MICROALBUMINURIA IN TAIWAN**

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**OBJECTIVES:** To project the cumulative incidence of end-stage renal disease (ESRD), life expectancy and costs in Taiwan of treating patients with diabetes, hypertension, and microalbuminuria (DHM) with either standard hypertension treatment alone or standard hypertension treatment plus irbesartan 300 mg daily. **METHODS:** A peer-reviewed, published Markov model that simulated progression from microalbuminuria to nephropathy, doubling of serum creatinine, ESRD, and all-cause mortality in patients with DHM was adapted to Taiwan. Three strategies were compared: A) early use of irbesartan (i.e. start treatment in subjects with microalbuminuria) versus B) late use of irbesartan (i.e. as from overt nephropathy), or C) standard hypertension care (with comparable blood pressure control). Cumulative incidence of ESRD, costs and life expectancy were projected for a hypothetical cohort of 1000 subjects. Treatment-specific progression and mortality probabilities were derived from published trials: IRMA-2 (in microalbuminuria) and IDNT (in overt nephropathy). Medical management and cost data per state were obtained from published local sources. A flexible time horizon up to 25-years and third party payer perspective were used. Future costs and LE were discounted at 3% yearly. **RESULTS:** When compared to standard blood pressure control, early irbesartan was projected to reduce the cumulative incidence of ESRD from (mean  $\pm$  standard deviation) 22% to 8%, save TN \$248,302 (US \$7303), and add 0.702 life years per treated patient. Late irbesartan was dominant to control but dominated by early irbesartan. The superiority of early use of irbesartan over standard care was robust for most variables, except for the cost of dialysis and the time horizon. Break-even occurred after 12 years. **CONCLUSIONS:** Treating DHM patients with early irbesartan was projected to reduce the incidence of ESRD, extend life and reduce costs. Treating patients at a later stage is still beneficial, however to a lower extent. Applying flexible time horizons shows additional relevant information to decision makers.

**PCV2**

**ACHIEVEMENT OF THE EUROPEAN 1998 LDL-C GOAL BY HYPERCHOLESTEROLAEMIC PATIENTS IN THE STELLAR TRIAL: AN EVIDENCE-BASED MEDICINE (EBM) APPROACH**

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**OBJECTIVES:** To determine the number needed to treat (NNT) for one additional patient to achieve the Joint European Task Force 1998 goal for low-density lipoprotein cholesterol (LDL-C) of  $<3.0$  mmol/L (116 mg/dL) at 6 weeks for rosuvastatin 10 mg compared to atorvastatin, pravastatin and simvastatin. Patients included in the Statin Therapies for Elevated Lipid Levels compared Across doses to Rosuvastatin (STELLAR) trial had an initial LDL-C  $\geq 4.1$  mmol/L (160 mg/dL) and  $<6.5$  mmol/L (250 mg/dL). **METHODS:** Data on patients achieving the European 1998 LDL-C goal with rosuvastatin and the other statins

were extracted and recalculated using an intention to treat (ITT) approach where all patients randomised were included in the analysis and any dropouts were assumed to be treatment failures. The ITT analysis formed the basis of the NNT calculations. Negative NNT's were interpreted as infinity. **RESULTS:** The NNT's for rosuvastatin 10 mg compared to the other statins are: atorvastatin 10 mg (3.9, 95%CI: 2.8 to 6.3), 20 mg (9.5, 95%CI: 4.9 to 135.8); 40 mg (361.1 in favour of atorvastatin, 95%CI: 10.7 to infinity); 80 mg (17.7 in favour of atorvastatin, 95%CI: 7.2 to infinity); simvastatin 10 mg (1.9, 95%CI: 1.6 to 2.3), 20 mg (3.1, 95%CI: 2.3 to 4.4); 40 mg (6.7, 95%CI: 4.0 to 19.8), 80 mg (67.4, 95%CI: 9.4 to infinity); pravastatin 10 mg (1.4, 95%CI: 1.2 to 1.5), 20 mg (1.6, 95%CI: 1.4 to 1.8); 40 mg (1.9, 95%CI: 1.6 to 2.4). In applying NNT's, the numbers should be rounded up, e.g. an NNT of 3.9 means that you need to treat 4 patients with rosuvastatin 10 mg rather than atorvastatin 10 mg to get one additional patient to the LDL-C goal at six weeks. **CONCLUSIONS:** NNT's are the "currency" of EBM with an NNT  $< 40$  considered beneficial in chronic conditions. In this context, rosuvastatin 10 mg has an advantageous NNT profile compared to the available doses of other statins.

**PCV3**

**TIME TO LDL-CHOLESTEROL GOAL ATTAINMENT IN SPAIN**

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Majority of patients treated for hyperlipidemia with available cholesterol lowering drugs (LLD) do not achieve recommended LDL-C goal in Spain. **OBJECTIVES:** To assess LDL-C reduction and goal attainment over time and determine time period when patients are most likely to attain goal after initiation of LLD in Spain. **METHODS:** Retrospective cohort study conducted at 23 primary care centres and 16 outpatient lipid centres. Eligible patients were adults ( $\geq 18$  years) with CHD/CHD equivalent or 2+ major risk factors (2 + RF) prior to first prescription of LLD between January 1998–April 1999, and +36 months of follow-up data after. LDL-C goals were based on NCEP III guidelines (100 mg/dl for CHD/CHD equivalent patients, 130 mg/dl for 2 + RF group). Goal attainment analyses were based on proportion of patients at goal from those with a valid LDL-C measure at 3 month time intervals from therapy start, and on increase or decrease in that proportion for subsequent periods. **RESULTS:** A total of 619 patients (46% CHD/CHD equivalent and 54% nonCHD with 2 + RFs) were included in the study. Mean age was 60 years (SD 10.22), 48% were female. Statins were initial LLD in 90% patients. Only 20% CHD and 29% 2 + RF patients were at goal at study end. Proportion of patients at goal increased to 23% after 3 months of therapy start and remained stable afterwards around 25%. Increase in proportion of patients at goal was only positive (+23%) for the first 3 months ( $p < 0.05$ ) and then remained around 0% increase till study end. **CONCLUSIONS:** Percentage of patients at goal only increased during first three month period after start of lipid lowering therapy, remaining flat there-after. More aggressive lipid lowering therapy should be started for those not at goal after first 3 months from LLD start, to enable more patients to get to LDL-C goal.